IMC SKYNET ELECTRONIC CO.

The Switcher Experts

40 W

SNP-817 SERIES

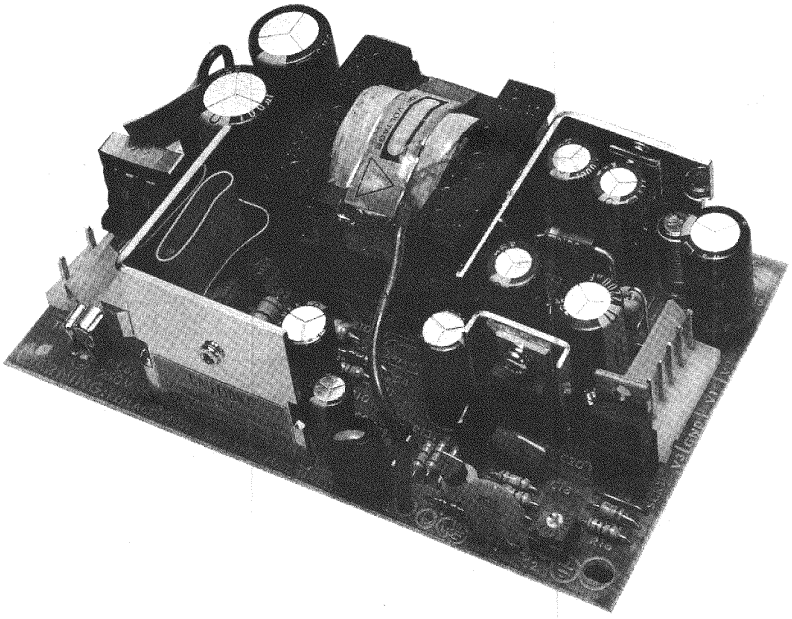
SNP-823 SERIES

FEATURES

- 115/230 VAC SELECTABLE INPUT
- UL RECOGNIED FILE NO. E 104272
- CSA CERTIFIED FILE NO. LR 57450
- VDE REG. NO. 2893
- FCC CONDUCTED B LEVEL

APPLICATIONS

- TERMINALS
- INDUSTRIAL CONTROL
- EXTERNAL FLOPPY SYSTEMS
- EXTERNAL HARD DISK SYSTEMS
- EXTERNAL TAPE BACK-UP SYSTEMS



DESCRIPTION

SNP-817/823 series is a 40 Watts flyback type free-running switching power supply. The AC input range of 115VAC or 230VAC is selected by a jumper on the PCB. All models in this series have overvoltage crowbar protection on output #1, and power foldback protection on all outputs.

SNP-817/823 series is designed to comply with UL, CSA and VDE safety regulations. The input line filter is provided to keep the noise under 6 dB of FCC class B conducted limited. With suitable additional outside filter this series also can pass VDE class B conducted regulations.

SNP-817/823 series is a form fit equivalent to Power General model 1040/3045 series and Computer Products model 80017/80023 series.

Universal version of SNP-817/823 series is SNP-304 series.

IMC SKYNET ELECTRONIC CO.

The Switcher Experts

40 W

SNP-817 SERIES

SNP-823 SERIES

GRNERAL SPECIFICATIONS

Input voltage ..... 90VAC to 130VAC
180VAC to 260VAC
Input frequency ..... 47Hz to 63Hz
Inrush current(Cold) ..15A at 115VAC
30A at 230VAC
Operating temperature ..... 0 to 50oC
Storage temperature ..-20oC to +85°C
Cooling ..... Free air convection
Efficiency ..... 70% typical
Holdup time 20ms

Overvoltage type ..... Crowbar
Trip point 6.2V +/- 0.4V
Or rated output +3V
Overload protection ..... Foldback
at 150% rated load
Switching frequency ..... >20KHz
Designed comply with .....
UL 478,1012 ,1950
CSA 22.2 NO. 220
VDE 0806 IEC 380, 950
EMI ..... Meet FCC class "B"

OUTPUT SPECIFICATIONS

MODEL NO.	OUTPUT VOLTAGE	LOAD			TOLERANCE	RIPPLE	LINE	LOAD
		MIN.	RATED	MAX.	+ / -	NOISE	REG.	REG.
SNP-8171	+5V	.6A	3A	5A	1 %	50mV	1 %	1 %
	+12V	0A	2A	3A	3 %	100mV	1 %	3 %
	-12V	0A	0.3A	0.5A	3 %	10mV	1 %	1 %
SNP-8172	+5V	.6A	3A	5A	1 %	50mV	1 %	1 %
	+15V	0A	1.5A	3A	3 %	100mV	1 %	3 %
	-15V	0A	0.3A	0.5A	3 %	10mV	1 %	1 %
SNP-8173	+5V	.6A	3A	5A	1 %	50mV	1 %	1 %
	+12V	0A	2A	3A	3 %	100mV	1 %	3 %
	-5V	0A	0.3A	0.5A	3 %	10mV	1 %	1 %
SNP-8174	+5V	.6A	3A	5A	1 %	50mV	1 %	1 %
	+24V	0A	1A	1.2A	5 %	120mV	1 %	5 %
	-12V	0A	0.3A	0.5A	5 %	10mV	1 %	1 %
SNP-8231	+5V	.8A	8A		1 %	100mV	1 %	1 %
SNP-8232	+12V	.4A	3.5A		1 %	100mV	1 %	1 %
SNP-8233	+15V	.4A	2.7A		1 %	100mV	1 %	1 %
SNP-8234	+24V	.2A	1.7A		1 %	100mV	1 %	1 %
SNP-8239	+24V	.2A	1.5A		1 %	100mV	1 %	1 %
	+5V	0A	0.5A		5 %	10mV	1 %	1 %

Note:

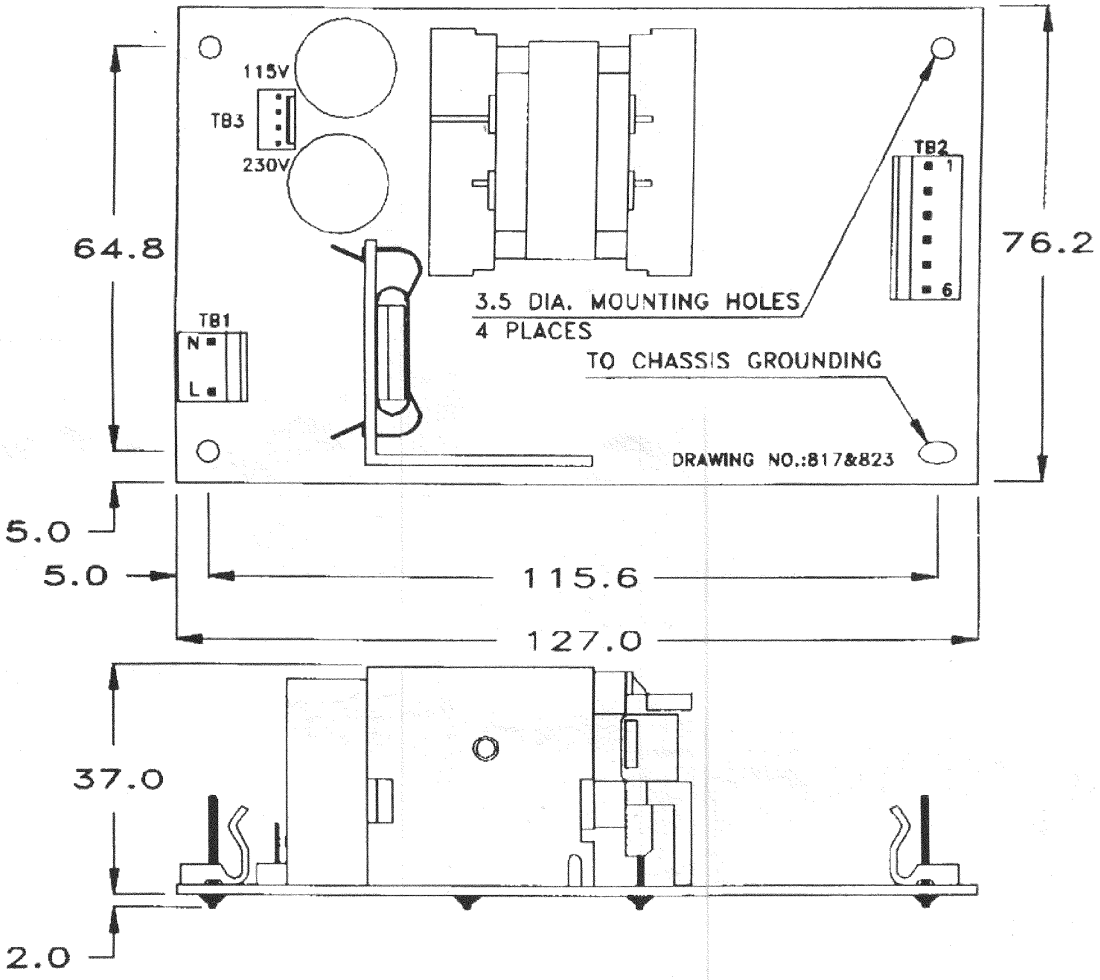
1. Each output can provide up to maximum load, but total load can not exceed 40 Watts continuously.
2. The main output of all models is adjusted to +/- 1% at rated load at factory.
3. Tolerance is measured with all outputs at 60% rated load.
4. Line regulation is measured from low line to high line at rated load.
5. Load regulation is measured by +/- 40% load change from 60% rated load, and all other outputs are kept at 60% rated load.
6. Ripple & noise is measured by using a 12" twisted wire terminated with a 47uFcapacitor.
7. Efficiency is measured at rated load.
8. All parameters except line regulation are specified at 115/230 VAC input, rated load, 25°C ambient.

IMC SKYNET ELECTRONIC CO.

The Switcher Experts

40 W
SNP-817 SERIES
SNP-823 SERIES

MECHANICAL SPECIFICATIONS



Note:

1. Dimensions shown in : mm (+-0.4mm)
2. PCB size: 76.2mm X127mm
3. Mounting holes : 64.8mm X 115.6mm
4. Weight : 300 g Approx.
5. Connectors :
   TB1- AC INPUT:
   Molex 5273-3 withdraw center pin or equivalent.
   TB2- DC OUTPUT:
   Molex 5273-6 or equivalent for multi-output.

Pin Assignment:

PIN / MODEL	1	2	3	4	5	6
SNP-8171	12V	5V	5V	GND	GND	-12V
SNP-8172	15V	5V	5V	GND	GND	-15V
SNP-8173	12V	5V	5V	GND	GND	-5V
SNP-8174	24V	5V	5V	GND	GND	-12V
SNP-8231	5V	5V	5V	GND	GND	GND
SNP-8232	12V	12V	12V	GND	GND	GND
SNP-8233	15V	15V	15V	GND	GND	GND
SNP-8234	24V	24V	24V	GND	GND	GND
SNP-8239	24V	24V	GND	GND	5V	5V

ELECTRICAL PERFORMANCE

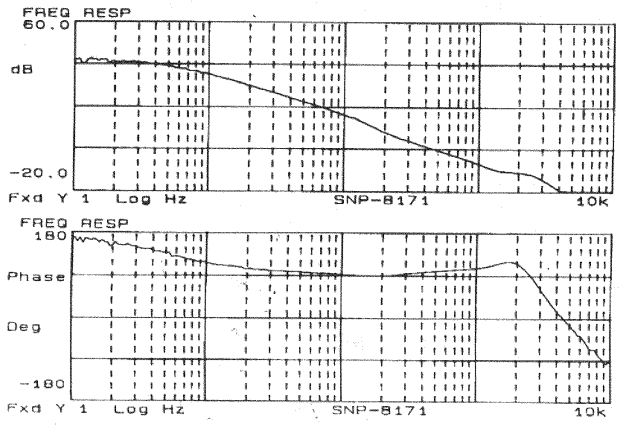
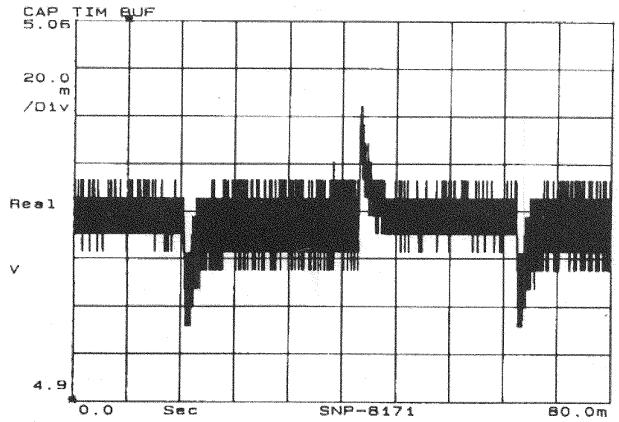


Fig.1 BODE DIAGRAM



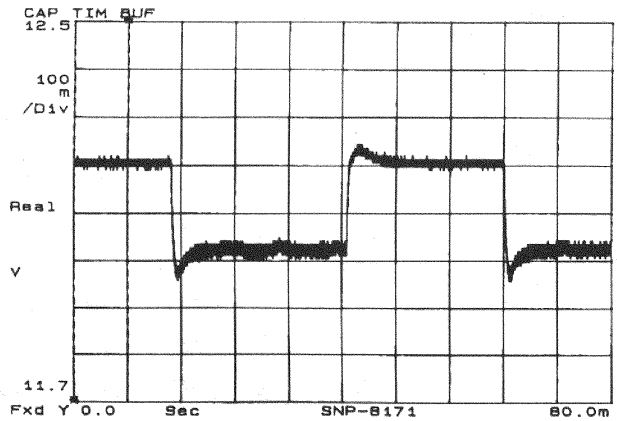


Fig.2 STEP RESPONSE

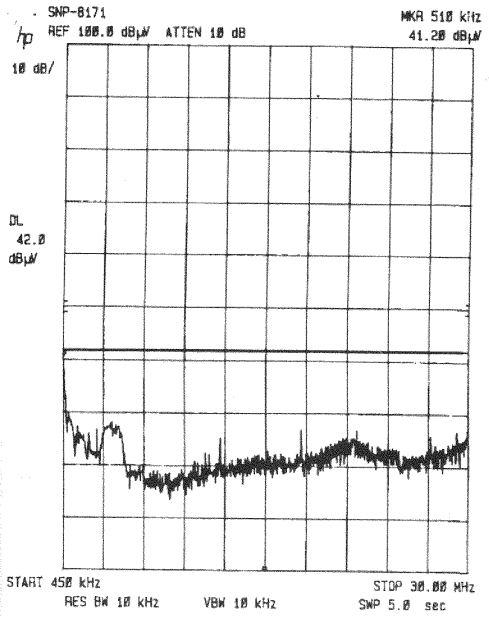


Fig.3 CONDUCTED NOISE

Note:

Fig.1 Show the stability of the circuitry by Bode Diagram.

Fig.2 Show the stability of the main loop (+5v) by changing the load of major aux. output from 20% to 100%.

Fig.3 Show the conducted noise level by 100% resistance loading.